#### **REMARKS**

Claims 10-18, 22, 24-36 and 38-50 are now pending in the application.

Claim 10 has been amended to recite an additional component (crude protein) of the feed composition. Support for this added element is found in the Examples. The other elements of this claim have not been narrowed.

Claims 22 and 36 have been amended to incorporate the description of the antibacterial fatty acid component as "a high lauric acid natural oil, or a derivative thereof having high lauric acid content," found in claims 23 and 37, respectively.

Claims 29 and 31 have been made independent of original claim 22 by incorporating the limitations of claim 22 and all intermediate claims. The scope of each of these claims is unchanged by these amendments.

The dependancy of claim 38 has been changed from canceled claim 37 to claim 36. The scope of this claim is unchanged by this amendment.

#### **CLAIM REJECTIONS**

The amendment to claim 10 addresses the rejection under 35 USC § 112, second paragraph, and now recites two components of the feed composition.

The amendments to claims 22 and 36 address the rejections under 35 U.S.C. § 102 (a) and (b). The reasons for rejecting these claims and claims 25, 26 and 40 which depend thereon, are now moot.

Applicant traverses the rejection of claim 49 as anticipated by each of Olund et al and Kabara. This claim depends on claim 45, which describes an animal feed composition that contains an amount of anti-bacterial fatty acid component in a specific range. Claim 45 was not rejected under 3 5 U.S.C. §102, so the claims dependent thereon are not anticipated by this reference.

### 35 U.S.C. §103

Claims 24, 27-35 have been rejected under 35 U.S.C. §103(a) based on Olund and claims 37-39, 41-47 and 50 have been rejected under 35 U.S.C. §103(a) based on Kabara. A number of allegations have been made to support the rejections. One which is relevant to a

substantial number of claims (claims 10-18, 22, 24-28, 32-36, 38-44 and 46) is the allegation that the high lauric acid oils possess the same activity as lauric acid in the absence of evidence to the contrary. No evidence has been cited within the references relied on or other prior art to support this allegation. The burden is on the Patent Office to present a prima-facie case of obviousness. Applicants need not present evidence to the contrary until such a showing is made. Neither reference shows the use of fatty acids in oil. Kabara teaches at col 5, line 21, that microbiocide esters(not acids) can be in an oil but does not indicate if the activity of these esters within oil is equivalent and provides no suggestion the activity of lauric acid would be equivalent if in an oil.

Furthermore, even if one skilled in the art could reasonably expect high lauric acid oils possess the same activity as lauric acid from the cited references, these references teach a distinct activity from the activity desired of Applicant's preferred compositions. The cited references use fatty acids to prevent spoilage. In preferred embodiments, Applicant uses fatty acids to directly affect the health of the animal which ingests the feed. The cited references disclose only the use of fatty acids and their esters to protect the animal which ingests the food.

# For example:

In the feeds of claim 25, the oils "promote the health of the animal;"
In the feeds of claims 26 and 49 the oils "enhance growth of the animal;"
In the feeds of claims 14, 27 and 28, the oils permit "less than 50% of an optimal antibiotic supplement" to be used;

In the feeds of claim 16, 31 and 32, the oils permit "less than 50% of an optimal antibiotic supplement for controlling *Salmonella typhimurium* to be used.

In the feeds of claims 17, 33 and 34, the oils permit "less than 50% of the allowable antibiotic supplement for controlling *Salmonella typhimurium* to be used.

The cited references provide no hint high lauric acid oils have an activity which provides these functions. It is alleged that the determination of the range of amounts having

optimum effectiveness is well within the level of one having ordinary skill. This is not possible since the cited references do not disclose or suggest these activities.

## **Claims 36-44**

The feed compositions of claims 36-44 are clearly unobvious in that the activity of the fatty acids and esters disclosed by the cited references is disclaimed. For the feeds of claims 36-44, the oils are incorporated "in a manner which does not protect said feed composition from microbial spoilage."

# High lauric acid oils

In view of the absence of direction within the cited references to add high lauric acid oils as anti-bacterial fatty acids to animal feeds and also the absence of any hint as to their activity with respect to antibiotic supplements, Applicant submits animal feeds which comprise such oils are unobvious.

#### Claims 29-31, 45 and 47-50

Claims 29-31, 45 and 47-50 define feeds which contain anti-bacterial fatty acids which need not be within an oil. These feeds have other features which render them unobvious over the cited references.

The feeds of Claims 29 and 30 have at least one anti-bacterial fatty acid component in the animal feed in an amount sufficient to enhance growth of the animal and allow less than 50% of a maximal antibiotic supplement to be used. As discussed above, the cited references provide no hint of these activities such that it would not be obvious to formulate such a feed.

The feeds of claim 31 have at least one anti-bacterial fatty acid component in an amount sufficient to permit less than 50% of an optimal antibiotic supplement to be used for controlling *Salmonella typhimurium* within the animal. The cited references also provide no hint of this activity. It is alleged it would be obvious the high lauric acid oils will kill Salmonella typhimurium in the absence of evidence to the contrary. However, it is the duty of the Patent Office to present evidence suggesting these oils have such activity.

Claims 45 and 47-50 define feeds with an amount of anti-bacterial fatty acid within the range of 2% to 7% by weight of said animal feed composition. Kabara discloses a broad range of effective amounts as "up to 30% by weight," (see claim 1) and usually "0.001% to 2% by weight." The disclosure by Kabara provides no direction to use an amount of anti-bacterial fatty acid component in the range of 2% to 7 % by weight. Therefore, the feeds of claims 45 and 47 -50 are unobvious.

Based on the above remarks, applicants submit that claims 1-18 and new claims 22-50 are in a form suitable for allowance and patentable over Kabara. Therefore, withdrawal of the rejections and allowance of these claims are earnestly solicited.

Respectfully submitted,

Richard J. Traverso (Reg. No. 30,595)

Attorney/Agent for Applicant(s)

(703) 812-5310

MILLEN, WHITE, ZELANO & BRANIGAN, P.C. Arlington Courthouse Plaza 1, Suite 1400 2200 Clarendon Boulevard Arlington, Virginia 22201

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# **VERSION TO SHOW THE CHANGES MADE**

Please amend claims 10, 22, 29, 31, 33, 36 and 38 as follows:

- 10. (Amended) An animal feed composition comprising <a href="crude protein and">crude protein and</a> an anti-bacterial fatty acid component, wherein the anti-bacterial fatty acid component is a high lauric acid natural oil, or a derivative thereof having high lauric acid content.
- 22. (Amended) An animal feed composition comprising an anti-bacterial fatty acid component and at least one antibiotic, wherein the anti-bacterial fatty acid component is a high lauric acid natural oil, or a derivative thereof having high lauric acid content.
- 29. (Amended) An animal feed composition according to claim 26, comprising an anti-bacterial fatty acid component and at least one antibiotic, wherein the combined amount of at least one antibiotic and at least one anti-bacterial fatty acid component in the animal feed is sufficient to enhance growth of the animal as compared to the feed composition without the added antibiotic and without the added anti-bacterial fatty acid component, wherein antibiotics in the animal feed comprise less than 50% of a maximal antibiotic supplement.
- 31. (Amended) An animal feed composition according to claim 22, comprising an anti-bacterial fatty acid component and at least one antibiotic, wherein antibiotics in the animal feed comprise less than 50% of an optimal antibiotic supplement for controlling Salmonella typhimurium.
- 36. (Amended) An animal feed composition comprising an anti-bacterial fatty acid component in an amount sufficient to promote the health of said animal,

wherein said anti-bacterial fatty acid component is incorporated in said feed in a manner which does not protect said feed composition from microbial spoilage <u>and wherein the anti-bacterial fatty acid component is a high lauric acid natural oil</u>, or a derivative thereof having high lauric acid content.

38. (Amended) An animal feed composition according to claim 37-36, wherein lauric acid in the high lauric acid oil, or derivative thereof, comprises 2 % to 10 % of the animal feed.